

FEDIOL's Position Paper on EU Bio-based Economy

Introduction and context

FEDIOL members are oilseed crushers and vegetable oil refiners, operating in the EU, who produce vegetable oils and protein meals for food, feed, biofuels, bioenergy and non-energy technical uses. An important part of our products are directly replacing fossil based products. The oilseeds crushing and vegetable oil refining plants are bio-refineries which already are a living existing example of the bio-economy. Since much of our feedstock comes from European farmers, our operations also foster rural development across Europe, while respecting environmental legislation and fulfilling sustainability criteria.

FEDIOL supports the Commission Strategy, dating back to 2012, for the development of a European Bioeconomy, aimed at creating an internal market for bio-products and help the transition towards a fossil-free future.

The Strategy paper on a European Bioeconomy identified the cross-cutting themes and societal challenges that need to be addressed to achieve smart, sustainable and inclusive growth. Notably, the strategy was considered to have a role to play in: ensuring food security, including the possible change in consumption patterns and the need for addressing both food losses and food waste; managing natural resources sustainably with a focus on the need to produce more with less and to reduce the stress on ecosystems; reducing the dependence on fossil resources recognising that Europe needs to become a low carbon society relying on resource efficient industries to produce bio-based products; mitigating climate change through a partial replacement of non-renewable resources and through substitution of water, carbon and energy intensive production processes. Finally, the 2012 bioeconomy strategy was expected to deliver growth and jobs, not least through innovation and diversification.

While a number of initiatives set out by the bioeconomy action plan have been pursued and implemented, the development of the bioeconomy would require new impetus to maintain and even further enhance the development momentum. As already clearly identified by the Commission at that moment, a better interaction of bioeconomy supportive policies is crucial.¹ A coherent policy framework would positively impact the confidence of private investors in research, development and innovation. This would increase production and consumption of renewable products, giving impetus to the growth in European economy.

We therefore welcome the recognition of the need for a revision of the 2012 Bioeconomy strategy in the recently published Circular Economy Package: the bioeconomy is an integral part of the circular economy as it is circular by nature and can contribute towards a more resource efficient Europe.

In light of this foreseen revision, FEDIOL would like to raise a number of observations and proposals on the EU Bioeconomy Strategy:

¹ *Commission Staff Working Document accompanying the document "Communication on Innovating for Sustainable Growth: A Bioeconomy for Europe" (2012)*

1) Bioeconomy & the application of definitions

According to the Commission Strategy, "*bio-based products*" are not only limited to chemicals and technical applications. Indeed, it is important to emphasize that food, feed, biofuels and bioenergy are an integral part of the bioeconomy, contrary to some stakeholders' vision limiting it to renewable industrial products.

The bioeconomy needs "*biorefineries*" to convert agricultural biomass into bio-materials throughout a continuous production process. The flexibility to be able to switch between different outlets is crucial for the sector. EU oilseed crushers and refiners are precisely contributing through the processing of agricultural raw materials to the production of food and feed as well as to bio-chemicals, bio-fuels and other bio-materials. Therefore, appropriate funding and investments in research should be ensured in order to fully exploit the potential of biorefineries.

In line with the Waste Framework Directive included in the Circular Economy Package, the definition of "*waste*" should ensure that the biomass which, after cultivation and/or processing, is being destined for other applications than food or feed such as for instance biofuels, bioenergy, oleo-chemicals or other technical applications, is not classified as food waste or food loss but rather as a valuable "(by)product".

2) Addressing sustainability objectives

Our food and non-food supply chains are faced with increasing sustainability demands. The sector itself, together with its customers, has engaged in many voluntary initiatives to guarantee sustainable products (such as certification, round tables for soy and palm, private commitments, etc).

We also agree that biomass used for conversion into bio-products should be produced in a sustainable way. Efforts, voluntarily driven by industry, to assess the environmental impact of products are already setting the basis for identifying and addressing hot spots in our supply chains and continuously improve our systems of production.

The market for bio-products is currently fragmented so the development of a harmonized set of sustainability standards or criteria could also ensure further transparency for the end consumer and facilitate competitiveness and intra-EU trade.

So far, beyond EU production subject to cross-compliance, the market for sustainable biomass is uneven. This results in a situation where the same raw material may be evaluated differently depending on whether it enters the food, feed, biofuels or bio-based production chains.

FEDIOL believes that, while sustainability certification can support the initial development and uptake of sustainable biomass production, policy makers should strive to encourage agricultural production systems and supply chains serving mainstream markets that are sustainable by default, removing the need for additional operators' audits and certifications and associated costs. For EU agriculture, this could be addressed through changes within cross-compliance. With regards to imported raw materials, long term policies should be developed with the goal of having global governments ensuring that agriculture complies with specific baseline standards of environmental protection while at the same time allowing for economic development. This

includes also mutual recognition of sustainability standards, for instance in relation to US feedstock.

Should the European Commission try at some point to put in place a separate set of rules governing sustainability for bio-based products, then attention should be paid to making sure that rules are compatible across the different supply chains.

3) Informing consumers about sustainable choices

The harmonisation of sustainability standards could simplify and increase the market uptake of bio-based products, therefore improving their acceptance by consumers.

In this sense, it is important to better engage consumers at large and to provide more information about the properties and impacts of bio-materials and bio-products (e.g. nutritional benefits, production methods and environment sustainability), in order to raise awareness of market alternatives and allow consumers to make informed choices.

However, this approach might not be enough if not coupled with a proper policy capable of improving the market competitiveness of bio-based products. The current situation prevents a real market uptake from happening, since the price of bio-based products is still much higher than fossil products'.

4) Cascading principle shall not undermine market economy

The Commission Communication on "European Industrial Renaissance" introduced the "Cascading Principle" seeking a value-based distribution of biomass between sectors.

FEDIOL members are conscious of the importance of availability and affordability of food and feed and have thus internalised the principle of "food first".

We believe EU agriculture has a role to play in addressing the global challenges linked to an increasing demand for food and biomass. To overcome problems of competition among different outlets, the goal should be that of producing sufficient quantities of biomass through sustainable agricultural systems and allowing production to be primarily channelled to food markets in times of shortage.

5) Ensuring long-term productivity of European agriculture

Bioeconomy policies must be developed in a coherent manner with relevant EU policies and in synergy with the Common Agricultural Policy (period 2021-2027) to roll-out smart agriculture, which would encourage farmers to produce more quantities of agricultural raw materials for food, feed and non-food markets under the Bioeconomy with much less input. To that end, the Commission should increase its support into agricultural infrastructure, research and development of new crops and techniques and their up-take at farm level. This would close productivity gaps between different EU regions, while increasing productivity across Europe, minimizing losses and waste. Agricultural land which, due to insufficient demand for agricultural products, is currently idle could be taken back into production thanks to biofuels and other applications. Agricultural systems need to be able to respond to EU consumers' demand and

different markets. The demand generated with the production of a range of bio-based products could serve as a tool to improve sustainable intensification and increase volumes of raw materials, thereby also contributing to increasing levels of self-sufficiency thus reducing import needs. A carefully designed policy, with inbuilt flexibility mechanisms, could allow the increased agricultural production to be used as a buffer in an event of supply shock, and be re-directed to food markets, ensuring that food remains the first priority and that prices are not negatively affected.

While elaborating the bioeconomy policies, the Commission should promote a science-based approach, support the use of and communication on modern technologies or breeding techniques along the bio-product supply chains whether for crop cultivation or enzymatic material production, tackling the public perception of these essential technological developments.

6) Driving European Bioeconomy

FEDIOL advocates a carefully designed bioeconomy policy which encourages market uptake and consumption of bio-products, avoids over-burdening biorefining industries with red-tape and lays down a clear, predictable and long-term legislative framework so as to grant appropriate operating conditions.

The vegetable oil industry encompasses the production of a wide range of bio-products, such as: lubricants (greases, hydraulic oils, oils for drilling and chain oils); transformer oils; coatings (inks and paint additives); surfactants (cosmetics, detergents); bioplastics; biofuels; candles (paraffin wax); glycerol (by-product of biodiesel production, replacing propylene glycol in soaps, cosmetics, detergents, paint). Identifying and implementing measures that incentivise the use of renewable materials over fossil-based products might be considered, particularly in cases when environmental contamination or food safety risks can be significantly reduced by such change. Such measures might come in the form of policies which, as we have seen in the case of biofuels, can be successful tools triggering investments in the market and providing a positive signal for speeding up production.

7) Rolling out the EU Bioeconomy Policies

FEDIOL believes that, in order to achieve a competitive and successful Bioeconomy for Europe, policy consistency shall be the guiding principle for EU policy-makers.

FEDIOL asks that particular attention is given to the following key policy areas, crucial for the EU vegetable oil biorefineries to remain viable and competitive providers for the EU Bioeconomy:

- Common Agricultural Policy:

As from 2020, EU agriculture should review its CAP-reform's objectives with a view to considering the transition to even smarter agriculture (i.e. precision farming, digitalisation, high-tech land machines), valuing crop rotation, sustainable intensification and adaptation to climate change, while allowing at the same time the production of sufficient quantities of biomass.

- **Climate & Energy Package 2030:**

The package will entail major changes to the EU legislative acquis and determine the next 15 years of bioeconomy policies. Under the Climate and Energy Package, the production of conventional biofuels should be fostered after 2020, as they are the stepping stone for the emergence of bioeconomy and essential for reducing GHG emissions in transport, in the absence of equivalent volumes of alternative fuels. What is more, current values of biofuels are supporting the meal industry through the production of considerable volumes of meal for use as animal feed.

The revision and update of ETS should take due account of the development and contribution of biorefineries towards climate change mitigation, removing burdens that could incur additional costs for bio-product chains. In a bioeconomy, fossil-based components are replaced by biobased ones: this replacement of delayed emissions should be compensated for under climate policies (ETS/effort sharing).

- **Circular Economy Package:**

The package should recognise the importance of biomass and bio-based products as one of the main priorities to achieving a fully sustainable circular economy in Europe. In that sense, bioeconomy - which encompasses the sustainable production of renewable resources and their conversion into food, feed, fibres, materials, chemicals and bioenergy through efficient and/or innovative technologies - is indeed circular by nature, and the use of renewable raw materials as an alternative to fossil-based ingredients and products should lead the transition to a resource-efficient low-carbon economy.

- **Waste Framework Directive:**

The definition of waste should not disqualify valuable by-products from their full and efficient use as biomaterials in different applications. The raw materials and semi-finished goods which agriculture, forestry and the food supply chain supply for use as materials and chemicals, after biorefining and processing, should be exempted from the waste legislation. Their impact on the environment is already regulated under specific application-based legislations, such as food and feed regulation.

- **Challenges in commodity markets and on access to agricultural raw materials:**

For a well-functioning bioeconomy, access to cheap and sufficient quantities of sustainable biomass will be critical. Biorefineries need to mitigate the risks associated with costs of raw materials and their availability. Appropriate operating conditions for processors shall be put in place, which do not affect their ability to hedge risks, using proper market instruments.

Biorefineries' access to raw materials shall also be facilitated by enabling their access to biomass produced with new agricultural technologies, breeding techniques and processes. As the logistics and production of food and feed production are so intertwined, a technical solution for food (for not yet authorised GM events) will be crucial for the sector.

ANNEX I

Potential market-pull measures that would support oilseed- and vegetable oil-based bioeconomy

- Mandatory use of vegetable oil-based **total-loss lubricants** in all environment-sensitive systems and along the food supply chain, which would reduce the amounts of mineral oil residues in all food products and thus improves food safety
- Mandatory use of vegetable oil-based **hydraulic fluids** in all environment-sensitive systems and along the food supply chain, which would reduce the amounts of mineral oil residues in all food products and thus improves food safety
- Mandatory use of vegetable oil-based **printing inks** in newspaper printing, which would reduce amount of mineral oil residues in recycled paper and thus improves food safety (this is in line with a position of the German Food Industry Association BVE)
- Include **externalities** into the price of fossil oil products and hereby creating a level playing field, which would entail benefits for climate protection and protection of abiotic resources
- Mandatory use of Bioeconomy-products in **public procurement**; e.g. use of biofuels in governmental vehicle fleets
- Continued support for the production of **biodiesel** in Europe
- Bioeconomy needs a lot of expertise from different fields. Typically, bioeconomy-systems around one type of biomass are not performed by just one company alone. **Collaborations between companies** should be encouraged
- Special budget for **research** in biorefineries under the 8th Framework Programme (FP8).

ANNEX II

Oilseeds and Fats Biorefinery

